

**IN MEMORIAM OF CORRESPONDING MEMBER OF THE ACADEMY OF
SCIENCES OF MOLDOVA,
PROFESSOR, DOCTOR HABILITATE IN PHYSICS AND MATHEMATICS**

Teodor SHISHIANU



(May 22, 1933 – April 2, 2014)

Corresponding member of the Academy of Sciences, doctor habilitate in physics and mathematics, Professor and Head of the Department of Microelectronics and Biomedical Engineering of the Technical University of Moldova, Elite Engineer of the Institute of Electrical Engineers UK Teodor SHISHIANU died on April 2, 2014. The scientific community of Moldova and abroad has lost a valuable scientist, the founder of the scientific school in the field of microelectronics and semiconductor devices. Professor Teodor Shishianu devoted his entire life to the Technical University of Moldova and made an important contribution to the development of scientific research and the education of scientific and engineering graduate students for the economy of Moldova.

Teodor Shishianu was born in 1933 in the village Tiganca, Cahul district. Corresponding member Teodor Shishianu graduated from the Faculty of physics and mathematics of the State Pedagogical Institute of Tiraspol in 1958, where he began his academic carrier teaching the physics and radio engineering courses. He defended his candidate's dissertation at the Ioffe Physical Technical Institute of the Academy of Sciences of the Soviet Union in Leningrad (at present, St. Petersburg) in 1965. After foundation of the Polytechnic Institute in 1964, he linked his life with this institute.

Talented organizer of the scientific activities and University education Teodor Shishianu essentially contributed to the development of scientific research and university/master studies, training of young scientists and engineers for the economy of the Republic of Moldova, acting at different positions: senior lecturer at the Polytechnic Institute (at present, the Technical University of Moldova (TUM)) (1965–1966); associate professor in 1967–1975; researcher and post-doctorate at the Ioffe Physical Technical Institute of the Academy of Sciences of the USSR in Leningrad (1975–1977); assistant professor (1978–1980); professor (since 1980); head of the Department of Microelectronics and Semiconductor Devices (TUM) for 24 years (1981–2003), founder and leader of the first Laboratory for physics and technology of semiconductor devices ($A^{III}B^V$ - GaAs, InP, InAs, GaP), which was reorganized in the International Center of modern technologies for studies and research (TUM) (since 2001).

In 1970–1971, he conducted scientific research at the University of Colchester, England, under the supervision of famous professor B.K. Ridley. In 1975–1977, he conducted scientific research at the Ioffe Physical Technical Institute (Leningrad) under the supervision of famous professor B.I. Boltaks. He was a researcher at the Technical University of Budapest (Hungary) in 1983 and an invited professor at the Sheffield Hallam University (England) in 1995. Scientific research in the Centers of Excellence and Centers of scientific internships in England, France, Germany, and Hungary have contributed to the personality of Teodor Shishianu as a scientist recognized in the world, including bibliography of over 280 publications and over 120 scientific papers at various International Conferences in England, Italy, France, India, Poland, Russia, Romania, Ukraine, Latvia, Hungary, and other countries.

Teodor Shishianu is recognized as one of the founders of the Polytechnic Institute (today Technical University of Moldova); one of the initiators of organization of the Mezon Microelectronics Plant in Moldova; the founder of the new direction in science and education—microelectronics and semiconductor devices—in the Republic of Moldova; the head of the Department of Microelectronics and Semiconductor Devices for 24 years (1981–2003); the organizer of medical electronics specialization with 12 promotions (1994–2006), which provided the base for the introduction of the Biomedical Engineering specialty in 2007.

He was the founder and organizer of the first European Master Studies in TUM, in the frame of International Tempus Project (Pre-JEP in 1995–1997, JEP, 1997–2001); he educated and trained 40 professors in universities of England, France, and Germany. On the basis of this project, he developed 32 new courses for Master studies in the current areas of Information Technology, Computer networking, Optical communications, Microelectronics and Biomedical systems, Computer aided design, etc., which provided the basis for studies in TUM and other universities of Moldova.

For outstanding results in science and education, Teodor Shishianu was awarded the following honors:

- The State Prize of the Republic of Moldova in science and technology, 1983;
- Medal "Meritul Civic," 1994;
- Elite Engineer of the Institute of Electrical Engineers, UK (CEng., Fellow of IEE, 1995);
- Medal of the Academy of Sciences „Dimitrie Cantemir”, 2003;
- Medal “Nicolae Testemitanu”, 2003, State University of Medicine and Pharmacy;
- Diploma of Honor of the Academy of Sciences of Moldova, 2008;
- Gold Medal, UTM, 2013.

The research and higher education community of our country has lost a valued personality with a very high level of culture, intelligence, humanity and teacher of excellence, who will live on in our memories. His productive research activities in the field of semiconductors and microelectronics, his creativity and directed actions will be an example for young researchers and encourage them to discover new materials, photonic and electronic devices.

God rest his soul in peace!

Academician I. Bostan, Rector of the Technical University of Moldova

Academician V. Canter, President of the National Council for Accreditation and Attestation